

## PATENT APPLICATION

Sheet 1 of 7

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

200310172-1

APPLICATION NO.

10/768,442

CONFIRMATION NO.

APPLICANT

S. Brandon Keller, et al.

FILING DATE

Herewith 1/30/4

GROUP

2825

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME | Pages, Columns, Lines Where<br>Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|------|--|
|                     | 1A |                    |                     |      |  |
|                     | 1B |                    |                     |      |  |
|                     | 1C |                    |                     |      |  |
|                     | 1D |                    |                     |      |  |
|                     | 1E |                    |                     |      |  |
|                     | 1F |                    |                     |      |  |
|                     | 1G |                    |                     |      |  |
|                     | 1H |                    |                     |      |  |
|                     | 1I |                    |                     |      |  |
|                     | 1J |                    |                     |      |  |
|                     | 1K |                    |                     |      |  |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE<br>OR APPLICANT | Pages/Columns/Lines Where<br>Relevant Passages/Figures Appear | Check if<br>Translation<br>attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
|  | 1L |                    |                     |                                  |   |                                     |
|  | 1M |                    |                     |                                  |   |                                     |
|  | 1N |                    |                     |                                  |   |                                     |
|  | 1O |                    |                     |                                  |   |                                     |
|  | 1P |                    |                     |                                  |   |                                     |

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

|   |    |  |
|---|----|--|
| W | 1Q | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,596, Entitled: System And Method Analyzing Design Elements In Computer Aided Design Tools; Filed August 25, 2003                 |
| M | 1R | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,608, Entitled: System And Method For Determining Unmatched Design Elements In A Computer-Automated Design; Filed August 25, 2003 |
| M | 1S | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,606, Entitled: System And Method For Determining Connectivity Of Nets In A Hierarchical Circuit Design; Filed August 25, 2003    |

EXAMINER

DATE CONSIDERED

1/31/6

|   |   |                                      |                  |
|---|---|--------------------------------------|------------------|
| FORM PTO-1449<br><br>LIST OF PATENTS AND PUBLICATIONS FOR<br>APPLICANT'S INFORMATION DISCLOSURE<br>STATEMENT<br><br>(Use several sheets if necessary) | ATTY. DOCKET NO.<br><b>200310172-1</b>        | APPLICATION NO.<br><b>10/768,442</b> | CONFIRMATION NO. |
|   | APPLICANT<br><b>S. Brandon Keller, et al.</b> |                                      |                  |
|   | FILING DATE<br><b>Harmon 1/30/4</b>           | GROUP<br><b>2825</b>                 |                  |
|   |   |                                      |                  |

## REFERENCE DESIGNATION




## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME | Pages, Columns, Lines Where<br>Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|------|--|
|                     | 2A |                    |                     |      |  |
|                     | 2B |                    |                     |      |  |
|                     | 2C |                    |                     |      |  |
|                     | 2D |                    |                     |      |  |
|                     | 2E |                    |                     |      |  |
|                     | 2F |                    |                     |      |  |
|                     | 2G |                    |                     |      |  |
|                     | 2H |                    |                     |      |  |
|                     | 2I |                    |                     |      |  |
|                     | 2J |                    |                     |      |  |
|                     | 2K |                    |                     |      |  |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE<br>OR APPLICANT | Pages/Columns/Lines Where<br>Relevant Passages/Figures Appear | Check if<br>Translation<br>attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
|  | 2L |                    |                     |                                  |   |                                     |
|  | 2M |                    |                     |                                  |   |                                     |
|  | 2N |                    |                     |                                  |   |                                     |
|  | 2O |                    |                     |                                  |   |                                     |
|  | 2P |                    |                     |                                  |   |                                     |

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

|   |    |  |
|---|----|--|
|  | 2Q | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,598, Entitled: Computer Aided Design System And Methods With Reduced Memory Utilization; Filed August 25, 2003                   |
|  | 2R | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,688, Entitled: System And Method For Iteratively Traversing A Hierarchical Circuit Design; Filed August 25, 2003                 |
|  | 2S | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,789, Entitled: Systems And Methods For Establishing Data Model Consistency Of Computer Aided Design Tools; Filed August 25, 2003 |

EXAMINER



DATE CONSIDERED

**1/31/6**

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

200310172-1

APPLICATION NO.

10/768,442

CONFIRMATION NO.

APPLICANT

S. Brandon Keller, et al.

FILING DATE

Herewith 1/30/4

GROUP

2825

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME | Pages, Columns, Lines Where<br>Relevant Passages or Figures Appear |
|---------------------|--------------------|---------------------|------|--|
|                     | 3A                 |                     |      |  |
|                     | 3B                 |                     |      |  |
|                     | 3C                 |                     |      |  |
|                     | 3D                 |                     |      |  |
|                     | 3E                 |                     |      |  |
|                     | 3F                 |                     |      |  |
|                     | 3G                 |                     |      |  |
|                     | 3H                 |                     |      |  |
|                     | 3I                 |                     |      |  |
|                     | 3J                 |                     |      |  |
|                     | 3K                 |                     |      |  |

## FOREIGN PATENT DOCUMENTS

|  | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE<br>OR APPLICANT | Pages/Columns/Lines Where<br>Relevant Passages/Figures Appear | Check if<br>Translation<br>attached |
|--|--------------------|---------------------|----------------------------------|---|-------------------------------------|
|  | 3L                 |                     |                                  |   |                                     |
|  | 3M                 |                     |                                  |   |                                     |
|  | 3N                 |                     |                                  |   |                                     |
|  | 3O                 |                     |                                  |   |                                     |
|  | 3P                 |                     |                                  |   |                                     |

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

|   |    |   |
|---|----|---|
| W | 3Q | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,594, Entitled: Systems And Methods For Determining Activity Factors Of A Circuit Design; Filed August 25, 2003  |
| W | 3R | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,687, Entitled: Systems And Methods Utilizing Fast Analysis Information During Detailed Analysis Of A Circuit Design; Filed August 25, 2003                  |
| W | 3S | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,595, Entitled: System And Method For Determining Applicable Configuration Information For Use In Analysis Of A Computer Aided Design; Filed August 25, 2003 |

EXAMINER

DATE CONSIDERED

1/31/6

**PATENT APPLICATION**

Sheet 4 of 7

|   |  |                                      |                         |
|---|--|--------------------------------------|-------------------------|
| <b>FORM PTO-1449</b><br><br><b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b><br><br>(Use several sheets if necessary) | <b>ATTY. DOCKET NO.</b><br>200310172-1 | <b>APPLICATION NO.</b><br>10/768,442 | <b>CONFIRMATION NO.</b> |
| <b>APPLICANT</b><br>S. Brand n Keller, t al.  |  |                                      |                         |
| <b>FILING DATE</b><br>Herewith 1/30/4   |  | <b>GROUP</b><br>2825                 |                         |

**REFERENCE DESIGNATION**

**U.S. PATENT DOCUMENTS**

| EXAMINER INITIAL | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|------------------|-----------------|------------------|------|---|
|                  | 4A              |                  |      |   |
|                  | 4B              |                  |      |   |
|                  | 4C              |                  |      |   |
|                  | 4D              |                  |      |   |
|                  | 4E              |                  |      |   |
|                  | 4F              |                  |      |   |
|                  | 4G              |                  |      |   |
|                  | 4H              |                  |      |   |
|                  | 4I              |                  |      |   |
|                  | 4J              |                  |      |   |
|                  | 4K              |                  |      |   |

**FOREIGN PATENT DOCUMENTS**

| DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|-----------------|------------------|-------------------------------|--|-------------------------------|
| 4L              |                  |                               |  |                               |
| 4M              |                  |                               |  |                               |
| 4N              |                  |                               |  |                               |
| 4O              |                  |                               |  |                               |
| 4P              |                  |                               |  |                               |

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

|   |    |   |
|---|----|---|
| W | 4Q | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,607, Entitled: Systems And Methods For Identifying Data Sources Associated With A Circuit Design; Filed August 25, 2003           |
| W | 4R | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,605, Entitled: Systems And Methods For Performing Circuit Analysis On A Circuit Design; Filed August 25, 2003                     |
| W | 4S | KELLER, S. Brandon; ROGERS, Dennis R.; ROBBERT, George H.; U.S. Patent Application Serial Number 10/647,768, Entitled: System And Method For Determining A Highest Level Signal Name In A Hierarchical VLSI Design; Filed August 25, 2003 |

EXAMINER

DATE CONSIDERED



1/31/6

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

200310172-1

APPLICATION NO.

10/768,442

CONFIRMATION NO.

APPLICANT

S. Brandon Keller, et al.

FILING DATE

Herewith 1/30/4

GROUP

2825

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME | Pages, Columns, Lines Where<br>Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|------|--|
|                     | 5A |                    |                     |      |  |
|                     | 5B |                    |                     |      |  |
|                     | 5C |                    |                     |      |  |
|                     | 5D |                    |                     |      |  |
|                     | 5E |                    |                     |      |  |
|                     | 5F |                    |                     |      |  |
|                     | 5G |                    |                     |      |  |
|                     | 5H |                    |                     |      |  |
|                     | 5I |                    |                     |      |  |
|                     | 5J |                    |                     |      |  |
|                     | 5K |                    |                     |      |  |

## FOREIGN PATENT DOCUMENTS

|  |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE<br>OR APPLICANT | Pages/Columns/Lines Where<br>Relevant Passages/Figures Appear | Check if<br>Translation<br>attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
|  | 5L |                    |                     |                                  |   |                                     |
|  | 5M |                    |                     |                                  |   |                                     |
|  | 5N |                    |                     |                                  |   |                                     |
|  | 5O |                    |                     |                                  |   |                                     |
|  | 5P |                    |                     |                                  |   |                                     |

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

|    |    |   |
|----|----|---|
| W  | 5Q | KELLER, S. Brandon; ROGERS, Dennis R.; ROBERT, George H.; U.S. Patent Application Serial Number 10/847,597, Entitled: System And Method For Determining Wire Capacitance For A VLSI Circuit; Filed August 25, 2003  |
| M- | 5R | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/708,682, Entitled: Method And Program Product For Determining Nets Requiring Detailed Electromigration And Self Heating Analysis In A Digital Integrated Circuit; Filed November 12, 2003 |
| W  | 5S | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/708,698, Entitled: Method And Program Product For Performing Self-Heating Analysis In A Digital Integrated Circuit Through A Single Cycle Transient Simulation; Filed November 12, 2003   |

EXAMINER



DATE CONSIDERED

6/31/6

**PATENT APPLICATION**

Sheet 6 of 7

|   |   |   |                         |
|---|---|---|-------------------------|
| <b>FORM PTO-1449</b><br><br><b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b><br><br>(Use several sheets if necessary) | <b>ATTY. DOCKET NO.</b><br><b>200310172-1</b> | <b>APPLICATION NO.</b><br><b>10/768,442</b> | <b>CONFIRMATION NO.</b> |
| <b>APPLICANT</b><br><b>S. Brandon Keller, et al.</b>  |   |   |                         |
| <b>FILING DATE</b><br><del>Herewith</del> <b>1/30/4</b>   |   | <b>GROUP</b><br><b>2825</b>                 |                         |

**REFERENCE DESIGNATION**

**U.S. PATENT DOCUMENTS**

| EXAMINER INITIAL |    | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|------------------|----|-----------------|------------------|------|---|
|                  | 6A |                 |                  |      |   |
|                  | 6B |                 |                  |      |   |
|                  | 6C |                 |                  |      |   |
|                  | 6D |                 |                  |      |   |
|                  | 6E |                 |                  |      |   |
|                  | 6F |                 |                  |      |   |
|                  | 6G |                 |                  |      |   |
|                  | 6H |                 |                  |      |   |
|                  | 6I |                 |                  |      |   |
|                  | 6J |                 |                  |      |   |
|                  | 6K |                 |                  |      |   |

**FOREIGN PATENT DOCUMENTS**

|  |    | DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|--|----|-----------------|------------------|-------------------------------|--|-------------------------------|
|  | 6L |                 |                  |                               |  |                               |
|  | 6M |                 |                  |                               |  |                               |
|  | 6N |                 |                  |                               |  |                               |
|  | 6O |                 |                  |                               |  |                               |
|  | 6P |                 |                  |                               |  |                               |

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

|   |    |   |  |
|---|----|---|--|
| W | 6Q | - | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/706,376, Entitled: Method And Program For Visual Display and One-Click Repair Of Electromigration And Self Heating Design-Rule Violations In A Digital Integrated Circuit Layout Database; Filed November 12, 2003               |
| W | 6R | ✓ | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/706,501, Entitled: Method And Program Product For Performing Electromigration Analysis In A Digital Integrated Circuit By Converting A Netlist To A DC Model And Performing DC Analysis Of The DC Model; Filed November 12, 2003 |
| W | 6S |   | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/706,526, Entitled: Method And Program Product For Performing A Worst Case Electromigration And Self Heating Analysis In A Digital Integrated Circuit With Worst-Case Superposition Of Partial Currents; Filed November 12, 2003  |

EXAMINER



DATE CONSIDERED

1/31/6

|   |                           |                 |                  |
|---|---------------------------|-----------------|------------------|
| <b>FORM PTO-1449</b><br><br><b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b><br><br>(Use several sheets if necessary) | ATTY. DOCKET NO.          | APPLICATION NO. | CONFIRMATION NO. |
|   | 200310172-1               | 10/768,442      |                  |
|   | APPLICANT                 |                 |                  |
|   | S. Brandon Keller, et al. |                 |                  |
|   | FILING DATE               | GROUP           |                  |
|   | Herewith 1/30/4           | 2825            |                  |

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|------------------|-----------------|------------------|------|---|
|                  | 7A              |                  |      |   |
|                  | 7B              |                  |      |   |
|                  | 7C              |                  |      |   |
|                  | 7D              |                  |      |   |
|                  | 7E              |                  |      |   |
|                  | 7F              |                  |      |   |
|                  | 7G              |                  |      |   |
|                  | 7H              |                  |      |   |
|                  | 7I              |                  |      |   |
|                  | 7J              |                  |      |   |
|                  | 7K              |                  |      |   |

## FOREIGN PATENT DOCUMENTS

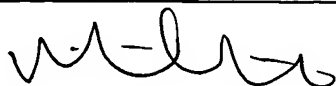
|  | DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|--|-----------------|------------------|-------------------------------|--|-------------------------------|
|  | 7L              |                  |                               |  |                               |
|  | 7M              |                  |                               |  |                               |
|  | 7N              |                  |                               |  |                               |
|  | 7O              |                  |                               |  |                               |
|  | 7P              |                  |                               |  |                               |

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

|   |    |   |
|---|----|---|
| M | 7Q | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/706,692, Entitled: Method And Program Product For Performing Electromigration Analysis In A Digital Integrated Circuit Through A Single Cycle Transient Simulation; Filed November 12, 2003                     |
| W | 7R | KELLER, S. Brandon; ROGERS, Dennis R.; LELM, Charles A.; U.S. Patent Application Serial Number 10/706,508, Entitled: Method And Program Product For Performing Self-Heating Analysis In A Digital Integrated Circuit Layout Database by Substituting Resistive Models For Active Devices; Filed November 12, 2003 |
|   | 7S |   |

EXAMINER

DATE CONSIDERED



1/31/6